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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte BRAD K. FAYETTE

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Appeal 2008-4273
Application 09/972,568[1]
Technology Center 2100

_____

Decided: December 22, 2008

_____

Before JEAN RAYMOND HOMERE, JAY P. LUCAS, and
CAROLYN D. THOMAS, *Administrative Patent Judges.*

HOMERE, *Administrative Patent Judge.*

DECISION ON APPEAL

I.   STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's final
rejection of claims 1 through 5, 11 through 17, and 20 through 22. Claims 6
through 10, 18, and 19 have been canceled. We have jurisdiction under 35
U.S.C. § 6(b). We affirm.

_____

[1] Filed on October 05, 2001. The real party in interest is Fujitsu Ltd.

The Invention

Appellant invented a method and software for processing a header portion of a message to be communicated among heterogeneous communication systems. (Spec. 1.) As depicted in Figure 2, a stateless protocol system (201) having a legacy protocol (208) and an upgraded protocol (209) interfaces with a top layer application (202), a memory (206), and an intermediate layer (203) to provide data conversion according to an established protocol. (Spec. 5.) As shown in Figure 3, the stateless protocol system (201) combines several parameters to create a format for a fixed length header such that the legacy protocol (208) defines legacy parameters for the header portion of an incoming message having a fixed length. (Spec. 6.) Upon receiving the incoming message from a sending machine (110), a receiving machine (140) pushes the fixed header portion contained therein into a previously allocated portion of memory (206) having a depth corresponding to the length of the fixed header portion. (Spec. 10.) If the length of the header portion is greater than the depth of the allocated memory portion, the receiving machine (140) removes the additional parameters from the header portion to thereby truncate the header length before processing the message. (Spec. 12.)

Illustrative Claim

Independent claim 1 further illustrates the invention. It reads as follows:

1.   A method for processing a header portion of a message, comprising:

establishing a legacy protocol, wherein said legacy protocol defines at least one legacy parameter for a header portion of a message, and wherein said legacy protocol defines a fixed legacy header length;

receiving an inbound message having a header portion;

allocating a memory portion from the computer memory, said memory portion having a depth corresponding to said fixed legacy header length;

pushing said header portion of said inbound message onto said memory portion thereby forming a received header, wherein the header portion is pushed onto said memory portion such that said header portion is truncated to form the received header when a length of said header portion is greater than said depth of said memory portion corresponding to said fixed legacy header length and wherein said header portion is not truncated when a length of said header portion is not greater than said depth of said memory portion, such truncation causing any header parameters associated with an upgraded protocol to be removed from said header portion; and

processing said received header according to said legacy protocol.

Prior Art Relied Upon

The Examiner relies on the following prior art as evidence of unpatentability:

Taylor	5,206,822	Apr. 27, 1993
Denny	5,544,325	Aug. 6, 1996
Birdwell	6,032,197	Feb. 29, 2000

3

Rejections on Appeal

The Examiner rejects the claims on appeal as follows:

A.   Claims 1 through 5, 11 through 17, and 20 through 22 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement.

B.   Claims 1, 2, 4, 5, 11 through 16, and 20 through 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Denny and Birdwell.

C.   Claims 3 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Denny, Birdwell, and Taylor.

Appellant's Contentions

1.   Appellant argues that the Examiner erred in finding that the original Specification does not support the claimed recitation of a header portion not being truncated when the length thereof is not greater than the depth of an allocated memory portion. Particularly, Appellant argues that the Specification implicitly provides support for such recited limitation by indicating that additional parameters are removed from the header portion to thereby truncate the header portion having a length greater than the depth of the memory portion. Therefore, Appellant argues that claims 1 through 5, 11 through 17, and 20 through 22 comply with the written description requirement. (App. Br. 14-15, Reply Br. 2.)

2.   Appellant argues that the combination of Denny and Birdwell does not render claims 1, 2, 4, 5, 11 through 16, and 20 through 22 unpatentable.

(App. Br. 15-19, Reply Br. 2-6.) Particularly, Appellant argues that neither Denny nor Birdwell teaches or suggests (1) a legacy protocol that defines a fixed legacy header length, and (2) an allocated memory portion having a depth corresponding to the fixed legacy header length. (App. Br. 17, Reply Br. 2-4.) Appellant argue that while Denny discloses a portion of a prefix being fixed, the entire prefix is variable in contrast. Similarly, Appellant argues that Denny's disclosed memory portion is dynamically expandable to store the entire length of the variable prefix, whereas the depth of the claimed memory portion is allocated to correspond to the length of the fixed header. (App. Br. 18, Reply Br. 3-5.) Further, Appellant argues that dynamically allocating a memory portion to accommodate a variable header length teaches away from truncating the header regardless of its length. Therefore, there would be insufficient rationale to support the Examiner's suggested combination of Denny's variable header length with Birdwell's truncation of a variable header to arrive at the claimed invention. (App. Br. 19, Reply Br. 6.)

Examiner's Findings/Conclusions

1.   The Examiner finds that Appellant's Specification provides support for truncating the length of the header portion if it is greater than the depth of an allocated memory portion. The Examiner finds, however, that such support does not necessarily lend itself to the claimed limitation of not truncating the length of the header if it is not greater than the depth of the allocated memory portion. Therefore, the Examiner finds that the claimed

limitation does not comply with the written description requirement. (Ans. 10-12.)

2.   The Examiner finds that Denny's disclosure of a fixed prefix portion having one or more parameters in a generated data message fairly teaches or suggests the fixed legacy header length, as recited in independent claim 1. (Ans. 13-17.) Further, the Examiner finds that Denny's disclosure of a buffer memory for reading therein the fixed prefix portion fairly teaches the claimed allocated memory portion with a depth corresponding to the length of the fixed header. (Ans. 17-19.) Additionally, the Examiner finds that Birdwell's teaching of truncating the header portion of a message to thereby strip away unneeded parameters would complement Denny's teaching of allocating a fixed prefix into a memory to ensure greater compatibility among heterogeneous systems on a network. (Ans. 20-22.) Therefore, the Examiner concludes that the combination of Denny and Birdwell renders claim 1 unpatentable. (*Id.*)

II.   ISSUES

1.   The first issue before us is whether Appellant has shown that the Examiner erred in concluding that the claimed invention fails to comply with the written description requirement. Particularly, the issue turns on whether Appellant's original disclosure supports the claimed recitation of --not truncating the length of the header if it is not greater than the depth of the allocated memory portion--.

2.   The second issue before us is whether Appellant has shown that the Examiner erred in concluding that the combination of Denny and Birdwell renders the claimed invention unpatentable. Particularly, the issue turns on whether one of ordinary skill in the art would have found sufficient rationale to combine the cited references to teach (1) a legacy protocol that defines a fixed legacy header length, and (2) an allocated memory portion having a depth corresponding to the fixed legacy header length, as recited in independent claim 1.

III.   FINDINGS OF FACT

The following findings of fact (FF) are supported by a preponderance of the evidence.

Appellant's Invention

1.   Appellant's Specification describes a receiving machine (140) that expects a message and header of a known length, and subsequently allocates a memory (206) of a corresponding depth for receiving the header. (Spec. 11, ¶ [0028].)

2.   The memory is allocated only sufficient memory storage space according to the legacy protocol (208). Additional parameters in the header are stripped to thereby truncate the length of the header. (Spec. 12-13, ¶¶ [0030] – [0031].)

Denny

3.   Denny discloses a method and system for propagating messages among systems having different software versions in a communications

network. As depicted in Figure 1, each DBMS (12, 14, 16, 18, 20) in the communication network (10) includes an associated input data buffer (12a, 14a, 16a, 18a, 20a) for receiving prefixes and bodies of messages generated from transaction requests issued by input devices (34, 36). Each of the DBMS also includes an associated output buffer (12b, 14b, 16b, 18b, 20b) for storing prefixes and bodies of the messages pending transmission. (Col. 4, ll. 36-41, col. 5, ll. 1-3.)

4.   As shown in Figure 2, each message includes a fixed prefix (42), and extended prefix (44), and a message body (46), each having a plurality of data fields (48) with various parameters. (Col. 5, ll. 27-40.)

5.   Denny discloses that either of the message prefixes (42, 44) can carry data representative of which DBMS originates the message and which DBMS is to process the message. (Col. 5, ll. 54-60.)

6.   Depending upon the particular software upgrade, the message generator (13) of the first DBMS reformats the transaction request received from input device (34) into the message format required by the particular software. Particularly, the extended prefix (44) of the generated message is dynamically variable to include and modify certain fields as required by the particular software upgrade. (Col. 6, ll. 4-28.)

7.   Upon receiving the transaction request from an input device (34, 36), the receiving DBMS (12-20) determines whether to process it locally or remotely depending on the workload management considerations, and software upgrades required. If the transaction request is processed locally, the local receiving DBMS reformats the request into the message.

8

However, upon determining that the request should be processed remotely, the remote receiving DBMS determines whether its input/output buffers have sufficient capacity to hold the combined prefixes. Otherwise, it allocates additional data memory as a larger replacement buffer. (Col. 6, ll. 29-56, col. 7, ll. 20-34.)

8.   Denny further discloses that in certain transaction requests, the message will be generated without the extended prefix. In such cases, the fixed prefix will be read into the buffer of the receiving DBMS and stored into the output buffer of said DBMS pending the transmission of the message to another DBMS for processing. (Col. 7, ll. 35-45.)

Birdwell

9.   Birdwell discloses a broadcast transmission system wherein data packet headers containing one or more fields are compressed to thereby remove certain parameter information therefrom. (Col. 2, ll. 48-56.)

IV.   PRINCIPLES OF LAW

Claim Construction

"[T]he words of a claim 'are generally given their ordinary and customary meaning.'" *Phillips v. AWH Corp.,* 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal citations omitted). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313.

"[T]he PTO gives claims their 'broadest reasonable interpretation.'"
In re Bigio, 381 F.3d 1320, 1324 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211
F.3d 1367, 1372 (Fed. Cir. 2000)). "Moreover, limitations are not to be read
into the claims from the specification." *In re Van Geuns*, 988 F.2d 1181,
1184 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir.
1989)). Our reviewing court has repeatedly warned against confining the
claims to specific embodiments described in the specification. *Phillips v.
AWH Corp.*, 415 F.3d at 1323.

Written Description

The Court of Appeals for the Federal Circuit has held that "[t]o fulfill
the written description requirement [under 35 U.S.C. § 112], the patent
specification must describe an invention in sufficient detail that one skilled
in the art can clearly conclude that the inventor invented what is claimed."
Kao Corp. v. Unilever U.S., Inc., 441 F.3d 963, 967-968 (Fed. Cir. 2006)
(quoting *Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1364 (Fed.
Cir. 2003)). Our reviewing court has cautioned, however, that "[t]he
disclosure as originally filed does not . . . have to provide in *haec verba*
support for the claimed subject matter at issue." *Cordis Corp. v. Medtronic
AVE, Inc.*, 339 F.3d at 1364 (internal citation omitted). "Although [the
applicant] does not have to describe exactly the subject matter claimed, the
description must clearly allow persons of ordinary skill in the art to
recognize that [he or she] invented what is claimed." *In re Gosteli*, 872 F.2d
1008, 1012 (Fed. Cir. 1989) (citations omitted). Put another way, "the

applicant must . . . convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention.*" *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991) (emphasis in original). "The written description, although it need not include information that is already known and available to the experienced public, must be in sufficient detail to satisfy the statutory requirements, employing '[w]ords, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention.'" *Space Systems/Loral, Inc. v. Lockheed Martin Corp.*, 405 F.3d 985, 987 (Fed. Cir. 2005) (quoting *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997)). "Precisely how close the original description must come to comply with the description requirement of [section] 112 must be determined on a case-by-case basis." *Eiselstein v. Frank*, 52 F.3d 1035, 1039 (Fed. Cir. 1995) (quoting *Vas-Cath*, 935 F.2d at 1561)). With respect to negative limitations, our reviewing court has determined that an "express intent to confer on the claim language the novel meaning imparted by [the] negative limitation" is required, such as an "express disclaimer or independent lexicography in the written description." *Omega Engineering, Inc, v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003) (internal citations omitted).

Obviousness

Appellant has the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection

[under § 103] by showing insufficient evidence of *prima facie* obviousness
or by rebutting the *prima facie* case with evidence of secondary indicia of
nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir.
1998)).

> Section 103 forbids issuance of a patent when "the differences
> between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in
> the art to which said subject matter pertains."

KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1734 (2007).

In *KSR*, the Supreme Court emphasized "the need for caution in
granting a patent based on the combination of elements found in the prior
art," and discussed circumstances in which a patent might be determined to
be obvious. *KSR*, 127 S. Ct. at 1739 (citing *Graham v. John Deere Co.*, 383
U.S. 1, 12 (1966)). The Court reaffirmed principles based on its precedent
that "[t]he combination of familiar elements according to known methods is
likely to be obvious when it does no more than yield predictable results." *Id.*
The operative question in this "functional approach" is thus "whether the
improvement is more than the predictable use of prior art elements according
to their established functions." *Id.* at 1740.

The Federal Circuit recently recognized that "[a]n obviousness
determination is not the result of a rigid formula disassociated from the
consideration of the facts of a case. Indeed, the common sense of those
skilled in the art demonstrates why some combinations would have been

obvious where others would not." *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (citing *KSR*, 127 S. Ct. at 1739). The Federal Circuit relied in part on the fact that Leapfrog had presented no evidence that the inclusion of a reader in the combined device was "uniquely challenging or difficult for one of ordinary skill in the art" or "represented an unobvious step over the prior art." *Id.* at 1162 (citing *KSR*, 127 S. Ct. at 1741).

One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *See In re Kahn*, 441 F.3d at 987-988; *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991); and *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826 (CCPA 1968).

V.   ANALYSIS
35 U.S.C. § 112, first paragraph

Independent claim 1 recites in relevant part that the header portion of a message is truncated when the length of the header is greater than the depth of an allocated memory portion corresponding to the fixed legacy

13

header length. The claim further recites in relevant part that the header portion of a message is not truncated when the length of the header is not greater than the depth of an allocated memory portion corresponding to the fixed legacy header length.

As detailed in the Findings of Fact section above, Appellant's Specification particularly discusses, upon pushing a message header into a memory that had been allocated sufficient storage space according to a legacy protocol, removing *additional parameters* from the header to thereby truncate the header. (FF. 2.) One of ordinary skill in the art would immediately discern from the cited portions of the original disclosure that upon pushing the header into the allocated memory portion, if there are *additional parameters* in the header, they will be stripped. This will thus result in the header length being truncated so it can thoroughly fit in the allocated memory portion (i.e. header length > allocated memory depth). By the same token, the ordinarily skilled artisan would recognize that, if there are no *additional parameters* to be stripped, the header will be thoroughly and fully pushed into the allocated memory portion without thereby having to truncate the header. We therefore agree with Appellant that the ordinarily skilled artisan would be able to discern from the original disclosure that Appellant had possession of the inventive concepts of truncating the message header if the length of the message header exceeds the depth of the allocated memory portion, as well as not truncating the header if its length does not exceed the depth of the allocated memory portion. It follows that Appellant has shown that the Examiner erred in finding that the claimed

invention does not comply with the written description requirement.

Therefore, we will not sustain the Examiner's rejection of 1 through 5, 11

through 17, and 20 through 22.

35 U.S.C. § 103

Claims 1, 2, 4, 5, 11- 16, and 20-22

Independent claim 1 recites in relevant part (1) a legacy protocol

comprising at least one parameter that defines a fixed legacy header length,

and (2) an allocated memory portion having a depth corresponding to the

fixed legacy header length. As detailed in the Findings of Facts section,

Denny discloses a generated message having a fixed prefix, an extended

prefix and a body, each having a plurality of parameters respectively

defining them. (FF. 4.) Denny further discloses that when a DBMS receives

a generated message, it determines whether its buffer can store the combined

fixed–extended prefixes, and dynamically allocates memory in order to store

such prefixes. (FF. 7.) Additionally, Denny discloses that in certain cases,

where the extended prefix is absent from the generated message, the fixed

prefix is read into the input buffer of a receiving DBMS, and it is

subsequently held in the output buffer of the DBMS pending transmission.

(FF. 8.) We agree with the Examiner that the ordinarily skilled artisan

would recognize that in the limited case where a message is generated to

include only a fixed prefix and a body, there is no need for dynamically

allocating the buffer of the DMBS. In such a case, reading the parameters of

the fixed prefix into the buffer constitutes pushing the fixed prefix into the

allocated input buffer of the DBMS without having to expand the size of said buffer.

Further, Birdwell discloses compressing fields in a data packet header to thereby remove parameters from the message packet. (FF. 9.) The ordinarily skilled artisan would appreciate that in the particular case discussed above where the generated message disclosed in Denny's system includes only the fixed prefix and the body, Birdwell's disclosure would complement Denny's teachings by truncating the length of the fixed prefix if it exceeds the depth of the input buffer allocated in the receiving DBMS. The ordinarily skilled artisan would therefore appreciate that Denny and Birdwell disclose prior art teachings that perform their ordinary functions to predictably result in a DBMS that allocates a buffer portion to a fixed message header before forwarding the header to other DBMS. We therefore do not agree with Appellant that there is insufficient rationale for combining Denny and Birdwell. Likewise, we do not agree with Appellant that Denny teaches away from Birdwell. It follows that Appellant has not shown that the Examiner erred in concluding that the combination of Denny and Birdwell renders claim 1 unpatentable.

Appellant did not provide separate arguments with respect to the rejection of claims 1, 2, 4, 5, 11 through 16, and 20 through 22. Therefore, we select independent claim 1 as being representative of the cited claims. Consequently, claims 2, 4, 5, 11 through 16, and 20 through 22 fall together with representative claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

Claims 3 and 17

Appellant argues that the combination of Denny, Birdwell and Taylor does not render claims 3 and 17 unpatentable. Particularly, Appellant argues that Taylor does not cure the deficiencies of the Denny-Birdwell combination. (App. Br. 19.) We do not agree. As discussed above, we find no such deficiencies in the cited combination for Taylor to remedy. It follows that Appellant has not shown that the Examiner erred in concluding that the combination of Denny, Birdwell and Taylor renders independent claims 3 and 17 unpatentable.

VI.   CONCLUSIONS OF LAW

A.   Appellant has shown that the Examiner erred in concluding that claims 1 through 5, 11 through 17, and 20 through 22 fail to comply with the written description requirement under 35 U.S.C. § 112, first paragraph.

B.   We reverse the §112 rejection.

C.   Appellant has not shown that the Examiner erred in concluding that the combination of:

    1.   Denny and Birdwell renders claims 1, 2, 4, 5, 11 through 16, and 20 through 22 unpatentable under 35 U.S.C. § 103(a).

    2.   Denny, Birdwell and Taylor renders claims 3 and 17 unpatentable under 35 U.S.C. § 103(a).

D.   We affirm the § 103 rejections.

VII.   DECISION

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

msc

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